

October 17, 2002

The Honorable Richard A. Meserve
Chairman
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Dear Chairman Meserve:

SUBJECT: DRAFT REPORT "GUIDANCE FOR PERFORMANCE-BASED REGULATION"

During the 496th meeting, October 10-12, 2002, the Advisory Committee on Reactor Safeguards reviewed the draft report "Guidance for Performance-Based Regulation," dated August 2002. During this review, we had the benefit of discussions with representatives of the NRC staff and of the documents referenced.

In its Strategic Plan, the Commission states that it is a strategy of the NRC to employ less-prescriptive, performance-based regulatory approaches to maintain safety and reduce regulatory burden. This draft report is intended to provide guidance for developing performance-based options in regulatory decisionmaking, such as changes to regulatory guides.

We agree with the staff's proposal to publish this guidance as a NUREG/BR report. This guidance will be useful to the staff in developing performance-based alternatives to existing regulations. Before issuing the new guidance, however, the staff should provide more extensive discussion of safety margins and performance parameters.

The draft guidance declares a safety margin to be adequate, even when the performance objective is not met, provided that corrective action can be taken to avoid a serious condition. This is an essential attribute of performance-based regulation, and the implementers of the proposed guidance will face the issue of selecting the "serious condition." In the reactor arena, one can envision, for example, using the cornerstones of the reactor oversight process or core damage to define the serious conditions. This selection significantly affects the choice of the performance parameters. A discussion of the possible options in the three arenas of reactors, nuclear materials, and nuclear waste would be useful.

The selection of performance parameters and objective criteria for satisfactory performance intimately relates to the ease with which it can be demonstrated that the criteria have been met. There may be uncertainties in the estimation of the performance parameters that complicate this comparison. An acknowledgment of this fact, with some examples, would be useful.

We plan to continue to meet with the staff to discuss further progress on this important and difficult issue.

Sincerely,

/RA/

George E. Apostolakis
Chairman

References:

1. U.S. Nuclear Regulatory Commission, Draft NUREG-BR-XXXX, "Guidance for Performance-Based Regulation," August 2002.
2. U.S. Nuclear Regulatory Commission, NUREG-1614, Vol. 2, Part 1, "Strategic Plan," Fiscal Year 2000-Fiscal Year 2005.
3. U.S. Nuclear Regulatory Commission, SECY-01-0205, memorandum dated November 16, 2001, from William D. Travers, Executive Director for Operations, NRC, for the Commissioners, Subject: Status Report on Performance-Based Approaches to Regulation.
4. Letter dated September 8, 2000, from Dana A. Powers, Chairman ACRS, to William D. Travers, Executive Director for Operations, Subject: Proposed High-Level Guidelines for Performance-Based Activities.